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**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA**

PACIFIC COAST FEDERATION OF
FISHERMEN'S ASSOCIATIONS, *et al.*,

Plaintiffs,

v.

WILBUR ROSS, in his official capacity as
Secretary of Commerce, *et al.*,

Defendants.

SAN LUIS & DELTA-MENDOTA
WATER AUTHORITY, *et al.*,

Intervenor-Defendants.

Case No. 3:19-cv-07897-LB

**PLAINTIFFS' MOTION FOR
PRELIMINARY INJUNCTION**

Date: April 9, 2020

Time: 9:30 a.m.

Ctrm.: B

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INTRODUCTION AND STATEMENT OF ISSUES

Plaintiffs seek a preliminary injunction to prevent the Federal Defendants, including U.S. Bureau of Reclamation (“Reclamation”), National Marine Fisheries Service (“NMFS”), and U.S. Fish and Wildlife Service (“FWS”), from implementing a new operations plan for the Central Valley Project and State Water Project (collectively, “Water Projects”), that Federal Defendants concede will injure and kill more members of imperiled fish populations than the previous operations plan, and which will place those populations at significant risk of extinction as soon as the coming year. In light of the near-certain irreparable harm that will occur if the new operations plan is implemented during the next year as the parties litigate the merits of Plaintiffs’ claims, Plaintiffs seek to maintain the status quo, namely the previous—and more protective—operating regime, which was upheld by two panels of the Ninth Circuit.

Plaintiffs are entitled to a preliminary injunction because they are likely to succeed on their Administrative Procedure Act (“APA”) claims that NMFS and FWS (collectively, the “Services”) acted arbitrarily and capriciously, and in violation of the Endangered Species Act (“ESA”), in issuing biological opinions concluding that Reclamation’s operations plan for the Water Projects is “not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species,” 16 U.S.C. §1536(a)(2), and authorizing Reclamation to kill and injure increased numbers of protected species. Plaintiffs are similarly likely to succeed on their claim that Reclamation violated its independent duty under the ESA to ensure that its new Water Project operations plan does not jeopardize protected species and their critical habitat.

The Services’ Biological Opinions, issued on October 21, 2019 and adopted by Reclamation on February 18, 2020, reach conclusions that are directly contrary to numerous facts acknowledged by the Services, including: that the protected fish populations have been precipitously declining; that Water Project operations have significant, adverse effects on these imperiled populations; and that existing protections need to be *increased* to avoid further jeopardizing the species. In the face of these facts, there can be little doubt that the Services’ conclusions that Reclamation’s new operations plan, which *weakens* protections and permits more

1 fish to be killed and injured, will not jeopardize fish populations, are arbitrary and capricious.

2 Implementation of the new operations plan will have devastating effects. The new
3 operations plan eliminates or weakens practically every limit that was previously in place to
4 protect fish and their critical habitat. For example, Reclamation will be permitted to operate
5 incredibly powerful pumps in the Delta at rates that were previously prohibited, which will
6 increase harm to and kill Delta Smelt, an endemic fish that may well go extinct within the year,
7 and kill and degrade the habitat of Central Valley steelhead, spring-run Chinook salmon, and
8 winter-run Chinook salmon. Because, absent a preliminary injunction, there will be irreparable
9 injury to endangered and threatened fish populations and because the balance of equities
10 necessarily weighs in favor of species protection under the ESA, this Court should grant Plaintiffs'
11 motion for a preliminary injunction and require Federal Defendants to adhere to the previous
12 Water Project operations regime until the Court can resolve the merits of Plaintiffs' claims.

13 STATEMENT OF FACTS

14 This preliminary injunction motion seeks to protect threatened and endangered fish species
15 from the significant adverse effects that will be caused by Federal Defendants' implementation of
16 a new long-term Water Project operations plan, and the biological opinions authorizing those
17 operations, which significantly weaken and eliminate previously required measures designed to
18 protect these imperiled fish populations and their critical habitat.

19 I. The Water Projects And Their Effects On Threatened And Endangered Fish Species

20 The Central Valley Project is a massive federal water storage and diversion project
21 operated by Reclamation in two of California's major watersheds, the Sacramento River and the
22 San Joaquin River watersheds, including those rivers' confluence and estuary, the San Francisco
23 Bay/Sacramento-San Joaquin River Delta (the "Delta"). Decl. of Barbara Chisholm ("Chisholm
24 Decl."), Exh. B ("NMFS BiOp") at 2–3. The Central Valley Project operations are coordinated
25 with those of the State Water Project. *Id.* at 2, 4.

26 Together, Water Project operations affect vulnerable fish species living throughout the
27 Delta watersheds. First, the Water Projects draw millions of acre feet of water out of the Delta for
28 export each year using massive pumping plants, which are so powerful that they effectively cause

1 water to flow uphill towards the pumps instead of toward the ocean, an effect referred to as reverse
 2 flows in Old and Middle Rivers (“OMR”), two tributary rivers that lie close to the pumps. *See*
 3 Chisholm Decl., Exh. A (“FWS BiOp”) at 80. As explained by the Ninth Circuit, “[t]he process of
 4 the fish entering the [pumping] plants, known as entrainment, traps some 52 different species
 5 of fish” and “[s]maller fish . . . are killed in the pumps,” with those that are “salvaged” frequently
 6 not surviving. *San Luis & Delta Mendota Water Authority (“SLDMWA”) v. Jewell*, 747 F.3d 581,
 7 594–95 (9th Cir. 2014). These pumping operations adversely affect each of the species at issue
 8 here: Delta Smelt, Central Valley steelhead, and winter-run and spring-run Chinook salmon.

9 The Delta Smelt, once one of the most abundant pelagic fishes in the estuary, is a critically
 10 endangered species with a short, one-year lifecycle. *See* FWS BiOp at 65, 84–88, 94, 210; *see*
 11 *also* Chisholm Decl., Exh. C at 2 (Interior Secretary warning in 2016 that species may be headed
 12 toward extinction). Recent surveys report unprecedented and historically low abundance levels
 13 and confirm that the species is more vulnerable than ever: the species is “essentially undetectable”
 14 in long-running fish surveys in the Delta. FWS BiOp at 84–85, 88 (estimating entire 2019 adult
 15 population of 5,610 Delta Smelt, down from 1.1 million in 2012). Delta Smelt can experience a
 16 high level of mortality caused by the Water Projects’ export pumps. *SLDMWA v. Salazar*, 760
 17 F.Supp.2d 855, n.3 (E.D. Cal. 2010) (overturned on other grounds) (“Project pumping kills Delta
 18 smelt by sucking them directly into the pumps” and “by drawing them into fish ‘salvage’ facilities
 19 which collect fish diverted from entering the pumps, a process that kills the smelt”).

20 The imperiled populations of winter-run and spring-run Chinook, as well as Central Valley
 21 steelhead, are also adversely affected by pumping operations, which reduce their survival when
 22 they migrate from the freshwater rivers where they are born and rear, through the Delta, and out to
 23 the ocean.¹ NMFS BiOp at 65, 67, 85–86, 97–98, 105–06, 189–91, 196, 225, 764, 776–79.

24 Second, the Water Projects significantly alter the amount of fresh water that flows through

25 ¹ According to NMFS, endangered winter-run Chinook are at high risk of extinction, with the
 26 population showing “a precipitous decline” between 2007 and 2017, with an “increased risk of
 27 catastrophe.” NMFS BiOp at 65, 75–76. NMFS has also found that spring-run Chinook, listed as
 28 threatened under the ESA, may deteriorate to a high risk of extinction given recent significant
 declines in many core populations. *Id.* at 81, 94. And Central Valley steelhead, also listed as
 threatened, had only an estimated 40,000 adults in the early 1960s and the population has declined
 significantly since then. *Id.* at 98; *id.* at 108 (NMFS: species is likely to become endangered).

the Delta and into San Francisco Bay by storing water in upstream reservoirs, permitting diversions of water before it reaches the Delta, and pumping water out of the Delta. The amount of water flowing out of the Delta, known as “Delta outflow,” affects the quality and quantity of critical habitat for protected fish by affecting salinity, food availability, and other essential habitat attributes. *See, e.g.*, FWS BiOp at 80–81. The Water Projects’ operations dramatically reduce the amount and the quality of Delta Smelt habitat, including by contracting the low-salinity zone—in which Delta Smelt rear and spend much of their lives—and shifting it upstream where habitat is less suitable. *See id.* at 75, 81, 88, 121, 124.² Reduced river flows also adversely affect habitat for winter-run and spring-run Chinook and Central Valley steelhead, and reduce migratory survival. NMFS BiOp at 79, 85–86, 97–98, 189–92, 196–98, 225.

Finally, dams on the Trinity, Sacramento, Feather, American, Stanislaus, and San Joaquin Rivers have cut off access to upstream spawning and rearing habitat for salmon and steelhead; thus, Water Project reservoirs must be managed to ensure adequate storage of cold water to maintain water temperatures below the dams during key summer and fall months when these fish are spawning, while also maintaining adequate flows in these rivers to allow juvenile salmon and steelhead to successfully migrate downstream. *E.g., id.* at 70, 78, 97, 110.³

II. Prior Section 7 Consultations On Water Project Operations

Because Water Project operations severely impact imperiled fish populations, Reclamation’s operations plan has repeatedly been subject to the ESA’s consultation requirement. *See* 16 U.S.C. §1536(a)(2). Until February 18, 2020, when Reclamation adopted its new operations plan, Water Project operations were governed by a 2008 FWS Biological Opinion and a 2009 NMFS Biological Opinion. These opinions concluded that Water Project operations *would* likely jeopardize the continued existence of Delta Smelt, winter-run and spring-run Chinook salmon, and Central Valley steelhead, and imposed a number of key protective requirements for

² Delta Smelt spend most of their life span in the Delta’s low-salinity zone where saline and fresh waters mix, but they migrate upstream into freshwater to spawn. FWS BiOp at 65–67, 75, 97.

³ Thus, for example, when Reclamation fails to store sufficient cold water to provide adequate cold water flows below Keswick Dam, particularly during the spawning months of April to September, it can result in stream dewatering and lethal temperatures that kill winter-run Chinook eggs and fry. NMFS BiOp at 70, 75; *see also* 80, 189–92, 196–98 (similar temperature requirements for spring-run Chinook salmon, which spawns later in the year).

operations that were designed to avoid causing jeopardy to species, including:

- ***Requirements to protect fish from effects of pumping:***
 - limits on the *rate* of water pumped out of the Delta during key months, including limits on the magnitude of reverse (negative) flows in the Old and Middle Rivers to reduce entrainment caused by pumping;
 - limits placed on Delta pumping as a proportion of San Joaquin River inflow to the Delta in April and May (the “San Joaquin River inflow: export ratio”).
- ***Requirements to protect Chinook and steelhead from lethal water temperatures:***
 - water temperature requirements on the Sacramento River, Clear Creek, and Stanislaus Rivers;
 - Shasta Reservoir storage requirements requiring that water be “carried over” from one water year to the next (known as “carryover storage” requirements);
 - annual temperature management processes that required NMFS’s approval.
- ***Additional requirements to protect steelhead:***
 - Stanislaus River instream flow requirements.
- ***Additional requirements to protect Delta Smelt and their critical habitat:***
 - increased Delta outflow requirements in certain water year types.

See Chisholm Decl., Exh. Q (2008 FWS BiOp) at 276–85; *id.* Exh. R (2009 NMFS BiOp) at 575–78, 587–602, 619–24, 628–30, 640–44, 648–51.⁴ Many of these protective measures, however, were weakened or not implemented at all as a result of multi-year waivers during California’s recent drought. See, e.g., *NRDC v. McCarthy*, 231 F.Supp.3d 491, 493–94 (N.D. Cal. 2017); Chisholm Decl., Exh. W at 11-4149.

III. Federal Defendants Determine In 2016 That Fish Species Are Imperiled And More Protections Are Needed, Resulting In The Reinitiation Of Section 7 Consultation

As California emerged from its recent drought in 2016, federal and state agencies concluded that protected fish species had declined precipitously and that stronger protections were needed to reduce harms caused by Water Project operations. As a result, on August 2, 2016, Reclamation requested reinitiation of consultation with the Services. Chisholm Decl., Exhs. D, E.

On August 3, 2016, FWS agreed to reinitiate consultation and “recognize[d] that . . . new information . . . demonstrat[ed] the *increasingly imperiled state of the Delta Smelt and its designated critical habitat . . .*” *Id.*, Exh. F. (emphasis added). On August 17, 2016, NMFS also

⁴ The 2008 and 2009 Biological Opinions—and the requirements and limitations they imposed to protect species—were upheld by the Ninth Circuit. *Jewell*, 747 F.3d at 598–99; *San Luis & Delta-Mendota Water Authority v. Locke*, 776 F.3d 971, 981, 996–1010 (2014). The Ninth Circuit decisions provide helpful explanations of many of the protective measures and operational effects at issue here. See, e.g., *Jewell*, 747 F.3d at 606–07 (OMR and pumping), 616–17 (Delta outflow); *Locke*, 776 F.3d at 989, 996, 1003–04 (inflow: export ratio), 1004–05 (OMR flows and pumping).

1 agreed that reinitiation was required and that “recent data demonstrat[ed] *extremely low*
 2 *abundance levels* for endangered Sacramento River winter-run Chinook salmon and threatened
 3 Central Valley spring-run Chinook salmon” *Id.*, Exh. G (emphasis added).

4 On August 30, 2016, then-Interior Secretary Sally Jewell, in a memo to the President,
 5 explained that reinitiation of consultation “will likely lead to new or amended biological opinions
 6 that will *increase* protections for these species,” and that these new biological opinions could
 7 reduce water supply from the Delta. *Id.*, Exh. C at 2 (emphasis added). In addition to reinitiating
 8 consultation, on January 19, 2017, NMFS issued a draft amendment to its 2009 Biological Opinion
 9 that would have immediately strengthened protections for endangered winter-run Chinook salmon,
 10 which had been nearly extirpated in 2014 and 2015 due to high water temperatures below Shasta
 11 Dam during the drought, regarding water temperature impacts from Reclamation’s operations of
 12 Shasta Dam. *Id.*, Exh. H. Reclamation refused to implement this amendment to the 2009 NMFS
 13 Biological Opinion, instead deferring any changes to the reconsultation process. *Id.*, Exh. I at 1–2.

14 **IV. Ignoring The Purpose Of Reconsultation, Federal Defendants Authorize And Adopt**
 15 **New Water Project Operations That *Reduce* Protections For Imperiled Species**

16 Despite the broad consensus that reinitiation of the ESA consultation process was required
 17 because federally protected fish species needed *more* protections from Water Project operations, in
 18 December 2017, under the Trump administration, Reclamation proposed the opposite, and
 19 designed a new operations plan for the express purposes of “maximiz[ing] water deliveries” and
 20 increasing water supplies to contractors that had been reduced as a result of protections in the 2008
 21 and 2009 Biological Opinions. *See id.*, Exh. J at 61789–90. Nowhere in its notice did
 22 Reclamation acknowledge: that the species were in grave peril of extinction; the overwhelming
 23 scientific evidence that increasing water diversions from the Delta will increase harm to the
 24 species; or the consensus that, despite the protections offered by the 2008 and 2009 Biological
 25 Opinions, Water Project operations were causing further decline of the species. *See id.*

26 On January 31, 2019, Reclamation transmitted its Biological Assessment to the Services
 27 setting forth Reclamation’s new Water Project operations plan through the year 2030. Chisholm
 28 Decl., Exh. L (“BA”) at 4-1. The Services then drafted biological opinions assessing the effects of

the new operations plan. FWS, which is responsible for assessing effects on Delta Smelt, circulated portions of its biological opinion for independent scientific peer review in April and July 2019. FWS BiOp at 21. Peer reviewers raised numerous concerns, including that the plan would further degrade Delta Smelt critical habitat, would increase the risk of jeopardy, and would pose “great peril” for Delta Smelt. *See* Chisholm Decl., Exh. S. The final October 21, 2019 FWS Biological Opinion, however, while acknowledging the severe decline of the Delta Smelt and the new plan’s substantial adverse impacts, concluded that Reclamation’s new operations plan is *not* likely to jeopardize the continued existence or recovery of, or destroy or adversely modify the critical habitat of, the Delta Smelt (hereafter referred to as a “no jeopardy” conclusion). FWS BiOp at 84–88, 94, 210–11, 220, 393. The FWS Biological Opinion includes an “incidental take statement” that authorizes Reclamation, in implementing its new plan, to “take” (kill or injure) unlimited numbers of Delta Smelt as long as Reclamation implements its plan. *Id.* at 393–95.

NMFS, which is responsible for assessing the likely impacts of the proposed operations on protected Chinook salmon and steelhead, completed a 1,123-page biological opinion on or about July 1, 2019, and concluded that Reclamation’s plan *would* jeopardize those species and their critical habitat and therefore required increased protective measures. Chisholm Decl., Exh. M. NMFS, however, did not officially release that opinion. *See id.*, Exh. P. Instead, NMFS issued a revised Biological Opinion on October 21, 2019, which included a no jeopardy conclusion—reversing the July 1 conclusion. NMFS BiOp at 797. The NMFS Biological Opinion also includes an incidental take statement. *Id.* at 797–813.

On February 18, 2020, Reclamation issued its Record of Decision, formally adopting and implementing its new Water Project operations plan. Chisholm Decl., Exh. N. In doing so, Reclamation relied on the FWS and NMFS Biological Opinions.⁵

V. The Biological Opinions Permit Revised Long-Term Water Project Operations That Will Irreparably Harm Listed Fish Species

The 2019 Biological Opinions dramatically weaken or eliminate many, if not most, of the species protections that were required by the 2008 and 2009 Biological Opinions. These changes

⁵ Plaintiffs notified Reclamation of the Biological Opinions’ legal flaws on November 26, 2019, Dkt. 52-1, Exh. 1, but Reclamation did not adjust its operations plan in response to that notice.

1 will irreparably harm protected fish within the next six months, if not sooner.

2 Weakening and Elimination of Limits Related to Pumping and Exports. Reclamation’s
 3 own Biological Assessment confirms that its new operations plan will significantly increase the
 4 amount of water pumped out of and diverted from the Delta, with pumping causing greater
 5 magnitude of reverse flow (i.e., more negative flow) in the tributaries around the pumps (Old and
 6 Middle Rivers (OMR)) during critical winter and spring months when Delta Smelt are susceptible
 7 to entrainment and juvenile salmon and steelhead are migrating through the Delta. *See* BA, App.
 8 D at Table 40-3. This is because the revised operations (1) eliminate restrictions on pumping in
 9 April and May (the San Joaquin River inflow: export ratio required under the 2009 Biological
 10 Opinion) (2009 NMFS BiOp at 641–44), and (2) greatly weaken the OMR limitations imposed by
 11 the 2008 and 2009 Biological Opinions. In particular, while the previous regime required that
 12 OMR reverse flows be maintained within a range of -1,250 to -5,000 cfs⁶ from January to June, the
 13 new Biological Opinions generally only cap OMR flows at -5,000 cfs during the winter and
 14 spring, while allowing unrestricted pumping “when precipitation falls in the Central Valley and
 15 Delta watersheds.” *Id.* at 4-71. During such “Storm-Related” events, the new operations plan
 16 allows the Water Projects to divert up to maximum capacity, with virtually no limit on reverse
 17 OMR flows during these events, nor any limit on the duration, magnitude, or frequency of these
 18 events during the year. *Id.*; FWS BiOp at 47–48; NMFS BiOp at 59–60.

19 The weakening of restrictions on pumping will harm fish species by degrading their
 20 habitat, reducing survival through the Delta, and increasing their risk of being killed in the
 21 pumping infrastructure. *See, e.g.*, Decl. of Dr. Jon Rosenfield (“Rosenfield Decl.”) ¶47 (“[M]ore
 22 negative OMR reverse flows authorized in the 2019 USFWS BiOp will place Delta Smelt at
 23 increased risk of being drawn towards and into the . . . CVP and SWP export facilities, resulting in
 24 substantial direct and indirect mortality”); *id.* at ¶118 (removing I:E ratio will “increas[e] the
 25 likelihood that [Central Valley steelhead] will be extinguished”); *see also id.* at ¶¶50, 53, 56–57,
 26 102–05, 146, 185, 187, 200, 222–23, 225.⁷

27 ⁶ Less negative OMR flows are more protective of fish because they result in reduced entrainment
 28 of fish in the pumps and greater survival of migrating salmon and steelhead.

⁷ Dr. Rosenfield’s declaration is offered to demonstrate the irreparable harm that will result from

Elimination and Weakening of Protections from Temperature-Dependent Mortality. The NMFS Biological Opinion eliminates many of the critically important measures from the 2009 opinion that were intended to protect salmon from temperature-dependent mortality below Shasta Dam. For instance, the NMFS Biological Opinion eliminates requirements for carryover storage in Shasta Dam, which helps ensure adequate cold water will be available to support spawning the following year, and eliminates a requirement that Reclamation consult with NMFS before approving water allocations that affect instream water temperatures. *See* 2009 NMFS BiOp at 590–602. Reclamation’s own assessment shows that the result of these changes will be higher river water temperatures during key months when salmon and steelhead are spawning and/or rearing below Shasta and other upstream reservoirs. *See* BA, App. D at Tables 3-3, 6-3, 23-3.

The weakening of protections that were designed to ensure that high water temperatures do not kill salmon eggs is likely to result in increased mortality. Specifically, “operations of Shasta Dam permitted under the 2019 NMFS BiOp are very likely to increase mortality of winter-run eggs and fry (i.e., reduce productivity) and to reduce the extent of spawning and incubation habitat for this population via increased water temperatures downstream of Shasta Dam.” Rosenfield Decl. ¶149. Similarly, “temperatures anticipated to occur under operations authorized by the 2019 NMFS BiOp will produce high levels of egg mortality and very low egg-to-fry survival (productivity) for several key sub-populations of . . . spring-run Chinook Salmon.” *Id.* ¶211.

Weakening of Requirements for Minimum Stanislaus River Flows. Central Valley steelhead that spawn and rear in the Stanislaus River will suffer greater harm under the new operations plan because the NMFS Biological Opinion reduces required Stanislaus River flows and eliminates water temperature protections for steelhead that the 2009 NMFS Biological Opinion imposed. 2019 NMFS BiOp at 631–32, 635, 643; 2009 NMFS BiOp at 619–24.

These weakened requirements will harm steelhead because “[f]low reductions in the Stanislaus River will cause low river velocities that exacerbate high priority stressors for Central Valley Steelhead,” and “[i]ncreasing temperatures on the Stanislaus River . . . are likely to lead to substantial increases in mortality of incubating eggs and rearing Central Valley Steelhead juveniles the new Water Project operations plan.

1 that have just emerged from their eggs.” Rosenfield Decl. ¶¶129, 132; *see also* NMFS BiOp at
 2 779 (“Flow operations in the Stanislaus River are expected to continue to reduce the growth and
 3 survival of juvenile CCV steelhead by restricting access to suitable rearing habitat, and provide
 4 poor migration conditions for adults and juveniles.”).

5 Weakening of Requirements Ensuring Sufficient Delta Outflow. Reclamation’s own
 6 analysis of its new operations plan also demonstrates that Delta outflow will be reduced during
 7 key months. BA, App. D at Table 41-3. In the winter and spring, weaker OMR requirements and
 8 elimination of the San Joaquin River inflow:export ratio in April and May will allow more
 9 pumping, reducing freshwater outflow. *See id.* In the fall, outflow will be further decreased as a
 10 result of weaker habitat protections for Delta Smelt in wet and above-normal years.⁸ *Id.* Yet,
 11 “unless Delta Outflows are required to increase and not decrease . . . Delta Smelt will continue to
 12 suffer low survival between spring and fall and this will endanger the population, exacerbate the
 13 risks of extinction, and foreclose options to restore the species.” Rosenfield Decl. ¶70.

14 Incidental Take Statements Permit Greater Harm to Fish. The FWS and NMFS Biological
 15 Opinions include incidental take statements that increase the number of threatened and endangered
 16 fish that may lawfully be killed as incidental to Reclamation’s Water Project operations, including:

- 17 ○ Eliminating all numerical limits on the number of adult Delta Smelt that can be killed at
 18 the Delta pumps, and deferring to a future process the establishment of any limits on the
 number of juvenile that can be killed at the pumps, *see* FWS BiOp at 394–95.
- 19 ○ Allowing the Central Valley Project to legally kill 100% of the endangered winter-run
 20 Chinook salmon below Shasta Dam due to water temperatures in three consecutive years
 before reinitiation is required, *see* NMFS 2019 BiOp at 801;
- 21 ○ Increasing the number of juvenile steelhead that can be killed at the Delta pumps to 5,800
 22 per year (2,760 from December 1 to March 31; 3,040 steelhead from April 1 to June 15),
 23 which is more than twice the highest annual observed loss of steelhead since the 2009
 Biological Opinion took effect, *see id.* at 508, 810;

24 By reducing key protections for these species and permitting more of the species to lawfully be
 25 killed, these populations will be pushed further toward extinction. *E.g.*, Rosenfield Decl. ¶¶25–27.

27 ⁸ The requirement in the 2008 FWS BiOp known as “Fall X2” is a well-accepted surrogate for
 28 ensuring sufficient inflow and acceptable salinity levels for Delta Smelt survival; the 2019 FWS
 Biological Opinion replaces this with a weaker Summer-Fall Habitat Action. *See* FWS BiOp at
 51–52, 75–76, 95, 168.

ARGUMENT

Reclamation’s new Water Project operations plan will cause irreparable harm to Delta Smelt, Central Valley Steelhead, and winter-run and spring-run Chinook salmon that are protected under the ESA. The 2019 Biological Opinions, which themselves acknowledge that the new operations plan will result in increased mortality of these protected fish, are deeply flawed and violate section 7(a)(2) of the ESA, 16 U.S.C. §1536, and the Administrative Procedure Act, 5 U.S.C. §706. This Court should preliminarily enjoin Federal Defendants from implementing Reclamation’s new operations plan and the Biological Opinions, and require them to maintain the status quo established by the previous 2008 and 2009 biological opinions, to ensure that these fish populations are not driven closer to extinction by illegal agency action before this Court can resolve the merits of Plaintiffs’ claims. *See Chalk v. U.S. Dist. Court Cent. Dist. of California*, 840 F.2d 701, 704 (9th Cir. 1988) (“The basic function of a preliminary injunction is to preserve the *status quo* pending a determination of the action on the merits.”); *GoTo.com, Inc. v. Walt Disney Co.*, 202 F.3d 1199, 1210 (9th Cir. 2000) (explaining that the *status quo* refers to the “last uncontested status which proceeded the pending controversy”) (internal quotation marks omitted)).

I. Preliminary Injunction Standard

A preliminary injunction is warranted where, as here, plaintiffs have shown that they are “likely to succeed on the merits,” that they are “likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in [their] favor, and that an injunction is in the public interest.” *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008).⁹ In cases arising under the ESA, Congress has “removed from the courts their traditional equitable discretion in injunction proceedings of balancing the parties’ competing interests.” *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 422 F.3d 782, 793–94 (9th Cir. 2005) (internal quotation marks omitted). Thus, it is a “fundamental principle” that, when courts are “confronted with requests for injunctive relief in [ESA] cases,” the third and fourth prongs of the preliminary injunction

⁹ An injunction is also appropriate when “there are serious questions going to the merits—a lesser showing than likelihood of success on the merits,” “the balance of hardships tips *sharply* in the plaintiff’s favor, and the other two *Winter* factors are satisfied.” *All. for the Wild Rockies v. Pena*, 865 F.3d 1211, 1217 (9th Cir. 2017).

standard—the equities and public interest factors—“always tip in favor of the protected species.” *Cottonwood Envtl. Law Ctr. v. U.S. Forest Serv.*, 789 F.3d 1075, 1091 (9th Cir. 2015).

II. Plaintiffs Are Likely To Succeed On The Merits

A. The U.S. Fish and Wildlife Service Biological Opinion Is Arbitrary, Capricious, and Contrary to the Endangered Species Act

Plaintiffs are likely to succeed on the merits of their claim that the FWS Biological Opinion is unlawful under the APA because it is “arbitrary, capricious,” and “not in accordance with law”—namely, the ESA. 5 U.S.C. §706(2)(A); *Pac. Coast Fed’n of Fishermen’s Ass’n v. U.S. Bureau of Reclamation*, 426 F.3d 1082, 1090 (9th Cir. 2005). Plaintiffs are likely to succeed in demonstrating that the FWS Biological Opinion is unlawful because, among other flaws: (1) its conclusion that the new operations plan is not likely to jeopardize the continued existence or recovery of, or destroy or adversely modify the critical habitat of, the Delta Smelt (hereinafter, the “no jeopardy” conclusion) runs counter to the evidence before the agency, is not supported by any reasoned explanation, and contradicts the agency’s own findings; (2) the no jeopardy conclusion expressly relies on uncertain mitigation measures, contrary to the ESA’s requirements; and (3) it includes an incidental take limit that uses an unlawful “surrogate” or substitute measure for the number of Delta Smelt that may be injured or killed by Water Project operations.

1. The No Jeopardy Conclusion Is Arbitrary, Capricious, and Contrary to Law

The FWS Biological Opinion’s conclusion that Reclamation’s new Water Project operations are not likely to jeopardize Delta Smelt or destroy or adversely modify its critical habitat is arbitrary, capricious, and contrary to law. In determining whether an action will result in “jeopardy,” FWS must “assess[] whether the listed fish would be jeopardized by the aggregate of the proposed agency action, the environmental baseline, cumulative effects, and current status of the species.” *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 524 F.3d 917, 926 (9th Cir. 2008). A biological opinion violates the APA if its jeopardy conclusion is contrary to and unsupported by the record, not rationally connected to the facts, not supported by a reasoned explanation, or based on an incorrect legal standard. *Id.*; *Def. of Wildlife v. Zinke*, 856 F.3d 1248, 1262 (9th Cir. 2017). The FWS Biological Opinion suffers from all of these deficiencies.

1 First, the FWS Biological Opinion’s no jeopardy conclusion runs counter to the evidence
 2 and is not rationally connected to the facts in light of the opinion’s findings that: (1) the Delta
 3 Smelt is at record low abundance and at great risk of extinction, FWS BiOp at 210; (2) even under
 4 existing conditions the population of Delta Smelt is anticipated to decline by 70–100% over the
 5 next decade, from the already record low abundance in 2018, FWS BiOp Appendix 1 at 13; and
 6 (3) the new Water Project operations will cause adverse impacts on the vulnerable Delta Smelt
 7 population that remains, including increased harms to Delta Smelt from weakening existing
 8 species protections, *see, e.g.*, FWS BiOp at 210–14, 393 (FWS “anticipates” that “export of water
 9 from the Delta” will “kill or harm . . . all delta smelt within the south Delta affected by water
 10 operations and other areas of the Delta affected by reduced habitat quality”). These facts are
 11 irreconcilable with the FWS Biological Opinion’s no jeopardy conclusion.¹⁰

12 Put differently, there is simply no reasoned explanation of how, in the face of such an
 13 acknowledged and concrete risk of extinction and continued population decline, FWS concluded
 14 that the additional adverse impacts of the new Water Project operations will not jeopardize Delta
 15 Smelt. *See* FWS BiOp at 220. The Ninth Circuit has made clear that, “even where baseline
 16 conditions already jeopardize a species, an agency may not take action that deepens the jeopardy
 17 by causing additional harm.” *Nat’l Wildlife Fed’n*, 524 F.3d at 930; *see Turtle Island Restoration*
 18 *Network v. Dep’t of Commerce*, 878 F.3d 725, 737 (9th Cir. 2017) (explaining that even seemingly
 19 small additional harms can cause jeopardy if, under baseline conditions, a species is already
 20 expected to decline “to a level that represents a heightened risk of extinction” (internal quotation
 21 marks omitted)). Indeed, even where a project seeks only to continue past practices, that is not a
 22 reasoned basis to ignore the harms associated with those practices and authorize them to continue.
 23 In *S. Yuba River Citizens League v. Nat’l Marine Fisheries Serv.*, 723 F.Supp.2d 1247 (E.D. Cal.
 24 2010), the court explained that, even where a biological opinion “recognizes that past practices
 25 have caused a decline [and] that some of these practices (including numerous effects attributed to
 26 the action itself) are ongoing but have not been fully mitigated,” a statement that the action’s

27 ¹⁰ One independent peer reviewer noted the disconnect between the fact that “Delta Smelt
 28 abundance is the lowest ever observed and is expected to continue to decline,” and that the plan
 still “includes an annual increase in water exports from the ecosystem.” Chisholm Decl., Exh. S.

1 effects would not cause jeopardy, without more, “does not provide a rational connection between
2 the facts found and the conclusions reached.” *Id.* at 1266 (internal quotation marks omitted).

3 Here, FWS does not attempt to grapple with or rationally address the fact of the Delta
4 Smelt population decline or the adverse effects of Water Project operations on the Delta Smelt in
5 its no jeopardy conclusion. Instead, FWS states only that, “After reviewing the current status of
6 the delta smelt and its critical habitat, the Environmental Baseline for the Action Area, the effects
7 of the [Proposed Action], and the cumulative effects, it is the Service’s biological opinion that the
8 [Proposed Action] is not likely to jeopardize the continued existence of the species.” FWS BiOp
9 at 220. But the Ninth Circuit has warned that courts “cannot simply take the agency’s word that
10 the listed species will be protected under the planned operations.” *Nat’l Wildlife Fed’n*, 524 F.3d
11 at 935 n.16. “If this were sufficient, the [agency] could simply assert that its decisions were
12 protective and so withstand all scrutiny.” *Pac. Coast Fed’n*, 426 F.3d at 1092. Because the FWS
13 Biological Opinion fails to explain why a species that is admittedly on the brink of extinction will
14 not be jeopardized by Water Project operations that the agency recognizes will kill many Delta
15 Smelt, FWS BiOp at 393–94, its no jeopardy conclusion is arbitrary and capricious.

16 Further, FWS fails to provide any reasoned explanation for its no jeopardy conclusion in
17 light of Reclamation’s plan to weaken or eliminate Delta Smelt protections—such as Delta
18 outflow requirements and limits on OMR and entrainment—that FWS previously concluded were
19 essential to avoiding jeopardy. *See, e.g.*, Chisholm Decl., Exh. Q at 275–76, 279–82. Where an
20 agency departs from its previous findings, the bedrock principle that an agency “must examine the
21 relevant data and articulate a ... rational connection between the facts found and the choice made,”
22 means that the agency must examine its own “prior factual findings [and] conclusions,” and
23 “‘articulate a satisfactory explanation’ when it changes its mind.” *Defs. of Wildlife*, 856 F.3d at
24 1262 (quoting *Humane Soc’y of U.S. v. Locke*, 626 F.3d 1040, 1051 (9th Cir. 2010)). Here, for
25 example, FWS fails to explain why, despite its previous recognition of “the importance of
26 outflows to all life stages of Delta Smelt and to maintaining the primary constituent elements of
27 designated critical habitat,” *see* Chisholm Decl., Exh. F, the Biological Opinion concludes that the
28 new operations plan’s reductions of Delta outflows in most of the year, *see* BA, App. D at Table

41-3, will not jeopardize the Delta Smelt. *Ctr. for Biological Diversity v. Bureau of Land Mgmt.*, 422 F.Supp.2d 1115, 1134 (N.D. Cal. 2006) (noting that FWS’s prior “analysis and findings” are “relevant to determining whether the ultimate ‘no jeopardy’ finding is rational and supported by the record”). And although the very purpose of the reinitiated consultation was for FWS to consider *increasing* protections, a purpose with which FWS agreed, *see* Chisholm Decl., Ex. F, the agency fails entirely to explain why its Biological Opinion does not do so. *See Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 57 (1983).

Finally, to the extent that FWS asserts (contrary to the evidence before the agency) that the new Water Project operations will provide a similar level of protection for Delta Smelt as did the prior 2008 Biological Opinion, *see, e.g.*, FWS BiOp at 219–20, this rationale is based on an incorrect legal standard, and thus is not in accordance with law, 5 U.S.C. §706(2)(A). The question that FWS was legally required to answer is not whether Reclamation’s new operations plan is as protective of the Delta Smelt as the “Current Operating Scenario,” but rather whether, based on the best scientific and commercial information available, and in light of baseline conditions, proposed Water Project operations will jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. *See Nat’l Wildlife Fed’n*, 524 F.3d at 926. In fact, courts have previously held that even stating that protections will *increase* as compared to the status quo is not sufficient for a jeopardy analysis without more, because even under increased protections an action can jeopardize a species that has severely declined. *See, e.g., Aluminum Co. of Am. v. Adm’r, Bonneville Power Admin.*, 175 F.3d 1156, 1162 n.6 (9th Cir. 1999) (given imperiled status of the species, minor improvements in survival compared to prior operations may be insufficient to avoid jeopardy); *S. Yuba River*, 723 F.Supp.2d at 1267 (“[A]lthough the BiOp properly concludes that the project ... will partially reduce the impact of prior stressors, this is itself insufficient.”); *Nat. Res. Def. Council v. Kempthorne*, 506 F.Supp.2d 322, 371–72 (E.D. Cal. 2007) (assumption that “maintaining salvage at or below historic salvage levels will ensure that the 2004 [operations plan] is not likely to jeopardize the continued existence of the Delta smelt” was “unsupported” and “irrational,” and “focusing only on how proposed operations will either increase or decrease smelt take” improperly limited the analysis).

1 In addition, the logic that the new Water Project operations will not cause jeopardy because
 2 they provide a similar level of protection as did the 2008 Biological Opinion is hopelessly flawed
 3 in light of the drastic decline of the Delta Smelt population since 2008. FWS's own estimates
 4 demonstrate that the Delta Smelt population has declined from 509,428 individuals in 2008, to
 5 5,610 individuals in 2019, a reduction of two orders of magnitude to the lowest abundance on
 6 record. FWS BiOp at 88. In the context of this material decline, even assuming that the proposed
 7 Water Project operations maintain the current level of protection (which they do not), FWS fails to
 8 provide a reasoned explanation why doing so would be sufficient to avoid jeopardizing the Delta
 9 Smelt. As a result, the jeopardy analysis fails to articulate a rational connection between the facts
 10 found and the conclusions reached and is arbitrary and capricious. *See S. Yuba River*, 723
 11 F.Supp.2d at 1267 ("Because the BiOp concludes that the project will continue to impose stressors
 12 on listed species without explaining why these stressors will not jeopardize the species,
 13 the BiOp's no-jeopardy conclusion is arbitrary and capricious."); *Kemphorne*, 506 F.Supp.2d at
 14 373 ("[I]t is arbitrary for the agency to conclude that project operations will not result in jeopardy
 15 simply because the projects will take relatively fewer smelt than they did in the past, in the face of
 16 the undisputed fact that the smelt population has been declining steadily in recent years.").

17 **2. Reliance on Uncertain and Future Mitigation Measures to Support the No** 18 **Jeopardy Conclusion Is Arbitrary, Capricious, and Contrary to Law**

19 The FWS Biological Opinion is also arbitrary and capricious because its no jeopardy
 20 conclusion unlawfully relies on uncertain mitigation measures and fails to consider or explain why
 21 the Delta Smelt will not be jeopardized in the short term even if those mitigation measures are
 22 eventually implemented. The no jeopardy conclusion is explicitly based on four mitigation
 23 measures: (1) "OMR Management actions that will be implemented to provide protections to
 24 minimize entrainment"; (2) a "Summer-Fall Habitat Action that would improve habitat
 25 conditions"; (3) "completion of 8,000 acres of habitat restoration for delta smelt"; and (4) "near-
 26 term population supplementation that will help conserve diversity and increase resilience." FWS
 27 BiOp at 220–21. FWS, however, may only use these mitigation measures to support its no
 28 jeopardy conclusion if the measures "will actually occur," and will occur within the timeframe

1 necessary to protect the Delta Smelt, given its short one-year lifespan. *See Nat'l Wildlife Fed'n*,
 2 524 F.3d at 935–36; *see also S. Yuba River*, 723 F.Supp.2d at 1276–77 (“Reliance [on mitigation
 3 measures] is appropriate only where the programs are ‘under agency control or otherwise
 4 reasonably certain to occur.’”). The mitigation measures relied on by FWS are neither reasonably
 5 certain to occur nor likely to be effective in protecting the Delta Smelt in the short-term.

6 First, the “OMR Management actions” (limits on pumping in the Delta to protect Delta
 7 Smelt) are not reasonably certain to be implemented because they are not required or are riddled
 8 with exceptions. *See FWS BiOp* at 40–49, 221. For example, OMR Management actions only
 9 require “operat[ing] to an OMR index no more negative than a 14-day moving average of -5,000
 10 cfs *unless a storm event occurs*,” *id.* at 40 (emphasis added), and there is no limit on the number of
 11 storm events or the force of pumping during such storm events, *id.* at 48. In short, the new Water
 12 Project operations can frequently and repeatedly fail to meet the average OMR limit of -5,000
 13 cfs;¹¹ such measures are not reasonably certain “to provide protections to minimize entrainment,”
 14 *id.* at 221; and FWS therefore cannot rely on them to justify its no jeopardy conclusion.

15 Second, FWS relies on the so-called “Summer-Fall-Habitat Action” to provide adequate
 16 habitat for Delta Smelt in certain water years, *FWS BiOp* at 212–13, but that action is not
 17 reasonably certain to occur because it contains numerous exceptions, including language deferring
 18 to a future process whether to implement the action at all. *Id.* at 51–55; *see also id.* at 216.

19 Third, the Biological Opinion relies on the possibility of future habitat restoration that was
 20 both already required by the 2008 Biological Opinion and is not reasonably certain to be
 21 implemented in light of historical failures to complete such habitat restoration. *See FWS BiOp* at
 22 128, 173–74, 180 (admitting that Reclamation has failed to complete the restoration of 8,000 acres
 23

24 ¹¹ The Biological Opinion fails to recognize the uncertainty of these measures, in part because it
 25 makes unfounded assumptions about when and if they will be applied. Thus, the Biological
 26 Opinion assumes very limited magnitude and duration of OMR more negative than -5,000 cfs
 27 during storm events, even though it also imposes no limit on the magnitude, frequency or duration
 28 of such events. *Id.* at 141. As another example, the Biological Opinion’s modeling “includes the
assumption of OMR flow of -3,500 cfs” during the months of April and May in certain water year
 types, *FWS BiOp* at 151 (emphasis added), even though there is no requirement that an OMR flow
 of -3,500 cfs be maintained in these months, and the Biological Opinion recognizes that, while
 OMR more positive than -5,000 cfs “may result” in these months, more negative OMR is
 nevertheless permitted. *Id.*; *see id.* at 142.

1 of tidal marsh habitat by 2020 as was required by the 2008 FWS Biological Opinion, and instead
 2 promising to meet this previous commitment by 2030), 220; BA at 4-78 (admitting that only about
 3 2,000 of 8,000 acres required under the 2008 FWS Biological Opinion have been completed).
 4 Such uncertain future measures cannot reasonably be relied on to mitigate the Water Projects’
 5 immediate devastating effects on the Delta Smelt. *Sierra Club v. Marsh*, 816 F.2d 1376, 1389 (9th
 6 Cir. 1987) (under the ESA, “if an agency plans to mitigate its project’s adverse effects on an
 7 endangered species by acquiring habitat and creating a refuge, it must insure the creation of that
 8 refuge before it permits destruction or adverse modification of other habitat”).

9 Finally, the FWS Biological Opinion’s reliance on long-term mitigation measures is wholly
 10 unreasonable. The Biological Opinion relies on a proposal to supplement the wild Delta Smelt
 11 population with hatchery fish in future years, with a conservation hatchery coming online in 2030,
 12 FWS BiOp at 57, 172, but offers no reasoned explanation why the Water Projects’ unmitigated
 13 adverse effects will not jeopardize Delta Smelt—a species with a one-year life-cycle—in the
 14 interim. Given the extremely low current population numbers and the recognition that the species
 15 could well be on the brink of extinction *now*, FWS BiOp at 210–11, the Biological Opinion’s
 16 reliance on a “conservation hatchery expected to go on line at the date delta smelt are expected to
 17 blink out of the environment,” Chisholm Decl., Exh. S, is irrational. Particularly given the Delta
 18 Smelt’s short lifespan, the failure to address short-term impacts to the species before these
 19 mitigation measures are implemented renders the no jeopardy conclusion arbitrary and capricious.
 20 *See Nat’l Wildlife Fed’n*, 524 F.3d at 935 (holding that a biological opinion may not rely on future
 21 mitigation to support a no adverse modification conclusion without discussing the interim effects
 22 on the species in the context of the affected species’ life cycles); *Pac. Coast Fed’n*, 426 F.3d at
 23 1094 (rejecting agency’s no-jeopardy finding for failure to provide reasoned analysis of short-term
 24 impacts on salmon and explaining that an agency cannot “provide only partial protection for a
 25 species for several generations without any analysis of how doing so will affect the species”); *S.*
 26 *Yuba River*, 723 F.Supp.2d at 1269 (holding that biological opinion was arbitrary and capricious
 27 where it “le[ft] open the possibility of a period of increased entrainment,” but “d[id] not analyze
 28 the effects of this period”); *see also Ctr. for Biological Diversity*, 422 F.Supp.2d at 1130–31.

3. The Incidental Take Statement is Arbitrary, Capricious, and Contrary to Law

Beyond the fundamental flaws in the jeopardy analysis, the FWS Biological Opinion's incidental take statement for Delta Smelt is also arbitrary, capricious, and not in accordance with the requirements of the ESA. The FWS Biological Opinion uses a "surrogate" for the incidental take limit for Delta Smelt that are likely to be injured and killed by entrainment in the South Delta: it provides that if certain of the "OMR Management actions" that are part of the operations plan are followed, then any incidental injury or death of Delta Smelt is authorized. FWS BiOp at 395. ESA regulations, however, mandate that a surrogate may be used to set incidental take limits only if FWS: (1) "[d]escribes the causal link between the surrogate and take of the listed species," (2) "explains why it is not practical to express the amount or extent of anticipated take or to monitor take-related impacts in terms of individuals of the listed species," and (3) "sets a clear standard for determining when the level of anticipated take has been exceeded." 50 C.F.R. §402.14(i)(1)(i); *see also Arizona Cattle Growers' Ass'n v. U.S. Fish & Wildlife, Bureau of Land Mgmt.*, 273 F.3d 1229, 1250 (9th Cir. 2001) ("[FWS] must establish that no such numerical value could be practically obtained"); FWS BiOp at 394–95. The surrogate used by FWS for incidental take of Delta Smelt by Water Project operations fails to satisfy the second and third requirements, and the incidental take statement is therefore arbitrary and capricious. *See Oregon Natural Resources Council v. Allen* ("ONRC"), 476 F.3d 1031, 1041 (9th Cir. 2007) (holding that incidental take statement that failed these two requirements was "arbitrary and capricious" and "invalid").

First, the FWS Biological Opinion fails to provide a reasoned explanation for why a numerical limit for take of Delta Smelt cannot be implemented. The Biological Opinion simply asserts without further explanation that surrogates are used because:

it is impossible to accurately quantify and monitor the amount or number of individuals that are expected to be incidentally taken as a result of the PA [Proposed Action] due to the variability associated with the effects of the PA, the declining population size of delta smelt, difficulty in detecting individuals entrained or impinged, annual variations in the timing of various parts of the species' life cycle, and variation in how individual fish use habitat within the Action Area.

FWS BiOp at 394. As in *Center for Biological Diversity*, this claim of impossibility is undercut by the immediately prior use of a numerical limit. 422 F.Supp.2d at 1138 (assertion of

1 impracticability of population estimate “undercut by the fact that the 2003 BO included a specific
 2 number of desert tortoise take in the ITS”); *see* Chisholm Decl., Exh. Q at 286–87. Moreover, the
 3 Biological Opinion elsewhere demonstrates that the abundance and salvage (take) of Delta Smelt
 4 *can* be numerically estimated and monitored. The Biological Opinion describes how FWS has
 5 “completed a new delta smelt abundance indexing procedure” that estimates annual Delta Smelt
 6 populations “as best as they can be approximated with currently available information.” FWS
 7 BiOp at 85; *see also id.* at 88 Table 5-2. Nowhere does FWS explain why this new population
 8 index cannot be used to calculate a numerical annual expanded salvage take limit for entrainment
 9 like the one previously used.¹² Nor does the agency explain why take-related impacts cannot be
 10 monitored in terms of individuals of the listed species, given that the Biological Opinion’s
 11 incidental take statement explicitly *requires* Reclamation to monitor and report on take of
 12 individual Delta Smelt. FWS BiOp at 400–01 (requiring Reclamation to notify FWS within 24
 13 hours of the finding of any injured or dead delta smelt and to “preserve[] in a container” any
 14 “[i]njured or dead delta smelt observed in salvage”). As a result, FWS fails to establish that it is
 15 “not practical to express the amount or extent of anticipated take or to monitor take-related
 16 impacts in terms of individuals of the listed species,” and its incidental take statement is therefore
 17 arbitrary and capricious. 50 C.F.R. §402.14(i)(1)(i); *ONRC*, 476 F.3d at 1037–38.

18 The incidental take statement is also arbitrary and capricious because the surrogate take
 19 limit adopted by FWS does not “set[] a clear standard for determining when the level of
 20 anticipated take has been exceeded,” which would trigger reinitiation of consultation. 50 C.F.R.
 21 §402.14(i)(1)(i); *see Arizona Cattle*, 273 F.3d at 1249. Here, the surrogate for incidental take of
 22 Delta Smelt from entrainment in the South Delta includes no clear standard for identifying an
 23 unacceptable level of take because the “ecological conditions” in which incidental take is
 24 authorized simply mirror the range of imprecise OMR operations criteria set forth in the proposed
 25 action itself. *See, e.g.*, FWS BiOp at 395 (“negative OMR flows should be managed at no more

26 ¹² Alternatively, the Biological Opinion does not explain why it could not set a numerical limit
 27 using models given that the take statement itself already requires that Reclamation “use Service
 28 life cycle models or other Service-approved models when available *for the purposes of estimating
 proportion of the population affected by entrainment.*” FWS BiOp at 399 (emphasis added).

negative than -5000 cfs on a 14-day moving average *or at the flow determined through use of Service-approved life cycle models to limit recruitment to stable levels.*” (emphasis added)).

Indeed, as written, the incidental take statement would never trigger reinitiation of consultation as long as the Water Projects are operated according to plan, *no matter how many Delta Smelt such operations ultimately end up killing*. This contravenes the statutory purpose of take limits and is clearly impermissible under Ninth Circuit law. *See ONRC*, 476 F.3d at 1038–41 (incidental take surrogate was arbitrary and capricious where permissible level of take was defined by project’s own scope, and thus provided no meaningful trigger for reinitiation of consultation).¹³

B. NMFS’s Biological Opinion is Arbitrary, Capricious, and Contrary to the Endangered Species Act

Plaintiffs are also likely to succeed on their claim that the NMFS Biological Opinion, including its no jeopardy conclusion and take limits, violates the APA.

1. The No Jeopardy Conclusion Is Arbitrary, Capricious and Contrary to Law

The NMFS Biological Opinion’s conclusion that the new Water Project operations are not likely to jeopardize winter-run and spring-run Chinook salmon and Central Valley steelhead or destroy or adversely modify those species’ critical habitat is arbitrary, capricious, and not in accordance with law. In particular, NMFS’s no jeopardy conclusion runs counter to the Biological Opinion’s own findings that: (1) the fish species have suffered precipitous declines even under the 2009 Biological Opinion, and are in peril, *e.g.*, NMFS BiOp at 65, 75 (winter-run Chinook); 92, 94 (spring-run Chinook); 105–08 (steelhead); and (2) the Water Project operations will worsen conditions for salmon and steelhead as compared to the 2009 Biological Opinion, *e.g.*, *id.* at 382–84, 400–02, 483, 489–91, 500–02, 776–77. For example, the NMFS Biological Opinion finds that, as compared to operations under the 2009 Biological Opinion, Reclamation’s new operations plan will likely result in significant increases in salvage of winter-run Chinook salmon, spring-run Chinook salmon, fall-run Chinook salmon, and late fall-run Chinook salmon, *see* NMFS BiOp at 683; decrease the abundance of endangered winter-run Chinook salmon, *see id.* at 696; decrease

¹³ *ONRC*’s reasoning applies directly to this case, because, here too, the surrogate used is coextensive with the project in a manner that fails to set a trigger for reinitiation if the project takes more Delta Smelt than was anticipated or analyzed by the Biological Opinion. *Compare* FWS BiOp at 395 (surrogate take conditions), *with id.* at 40–42 (proposed action’s OMR Management).

1 survival of juvenile winter-run and yearling spring-run Chinook salmon migrating through the
 2 Delta, *see id.* at 382–83, 402, 702–03; and increase the risk of large population declines that
 3 threaten extinction, *see id.* at 707. Overall, the NMFS Biological Opinion admits that,

4 Based on the analyses of expected effects of the proposed action to ESA-listed CV
 5 Chinook salmon populations, *reductions in the survival and productivity of all CV*
 6 *Chinook salmon populations (including fall-run and late fall-run Chinook salmon)*
are expected to occur throughout the proposed action, and the greatest effects will
occur during the drier water years

7 NMFS BiOp at 683 (emphasis added). NMFS concomitantly finds that the new Water Project
 8 operations will “take,” i.e., harm or kill more of these species than was permitted under the 2009
 9 Biological Opinion.¹⁴ *See, e.g., id.* at 801, 810.

10 In short, NMFS’s no jeopardy conclusion is irreconcilable with its findings regarding the
 11 imperiled state of the Chinook salmon species and the Central Valley steelhead, as well as the
 12 abundant evidence that even the protections that existed under the prior 2009 Biological Opinion
 13 were not adequate to provide the conditions needed to prevent extinction. A species on the brink
 14 of extinction will be further jeopardized by additional reductions in survival and productivity. *See*
 15 *Nat’l Wildlife Fed’n*, 524 F.3d at 930 (“[A]n agency may not take action that will tip a species
 16 from a state of precarious survival into a state of likely extinction.”). The agency’s failure to
 17 follow this basic reasoning renders its decision irrational. *See S. Yuba River*, 723 F.Supp.2d at
 18 1266–67 (no rational connection between recognition that “past practices have caused a decline”
 19 and statement that continuation of those actions would not cause jeopardy).

20 Relatedly, the NMFS Biological Opinion fails to provide a reasoned explanation for its no
 21 jeopardy conclusion in light of the agency’s prior findings regarding the demonstrated need for
 22 specific types of protections for spring-run and winter-run Chinook salmon and Central Valley
 23 steelhead that it has omitted from its 2019 opinion. *See Defs. of Wildlife*, 856 F.3d at 1262. In
 24 particular, with respect to Shasta Dam operations, NMFS has repeatedly found that significantly

25 ¹⁴ To the extent NMFS’s no jeopardy conclusion rests on the rationale that the new operations will
 26 be similarly protective of fish as were those pursuant to the 2009 Biological Opinion, *see* NMFS
 27 BiOp at 543 (stating that the Proposed Action keeps “risks comparable to risks under the NMFS
 28 2009 Opinion”), that assertion is unsupported by the record, insufficient under the correct legal
 standard, and fails to provide a reasoned explanation in light of the marked decline of the species,
 the fact that the listed salmon populations remain at risk of extinction, and the resulting need for
 greater protections, *see supra* (discussing same issue in FWS Biological Opinion).

1 increased carryover storage, limits on water releases, and improved water temperature protections
 2 below Shasta Dam are crucial to protecting salmon and preventing jeopardy to the species.
 3 Chisholm Decl., Exh. H (2017 draft amendment to 2009 Biological Opinion that called for
 4 strengthening water temperature protections below Shasta Dam, including by setting maximum
 5 mortality levels by water year type); *see also id.*, Exh. M (July 1, 2019 opinion by NMFS staff
 6 concluding that Reclamation’s new operations would jeopardize listed salmonids, and identifying
 7 need for significantly stronger limits on temperature mortality below Shasta Dam); *id.*, Exh. R
 8 (2009 NMFS BiOp finding that “[r]educing egg mortality from high water temperatures is a
 9 critical step in slowing or halting [species’] decline”). The NMFS Biological Opinion, however,
 10 fails to provide such protections, and fails entirely to explain why the elimination of these
 11 protections that it previously deemed critical will not jeopardize fish or modify their habitat.¹⁵

12 Similarly, NMFS has previously and repeatedly found that OMR more negative than
 13 -5,000 cfs is not protective of migrating salmon and steelhead, that it is not sufficient to allow
 14 pumping at OMR levels more negative than -5,000 cfs until such time as salmon “salvage” is
 15 observed (because such pumping injures and kills fish even before salvage is observable), and that
 16 eliminating the inflow: export ratio in April and May, which is designed to ensure adequate flows,
 17 would be detrimental to salmon and steelhead. Chisholm Decl., Exh. R at 361–62; *id.* Exh. U; *id.*
 18 Exh. V (NMFS staff identifying “red flags” with weakening of 2009 Biological Opinion
 19 protections). Despite NMFS’s previous, consistent recognition of the importance of these
 20 protective measures, the NMFS Biological Opinion approves unlimited pumping during storm
 21 events (with OMR more negative than -5,000 cfs) until very high salmon salvage is observed at
 22 the pumps, eliminates the inflow:export ratio, and weakens or eliminates other restrictions on
 23 Delta pumping from the 2009 NMFS Biological Opinion. NMFS fails to provide a reasoned
 24 explanation why the very protections it previously determined were necessary are now left out in
 25 favor of allowing more fish to be killed. NMFS’s failure to provide a reasoned explanation of why
 26

27 ¹⁵ In fact, Reclamation’s modeling (relied on by NMFS) shows that the new operations will result
 28 in mortality that is up to twice the levels proposed by NMFS in 2017. *Compare* BA, App. D at
 Table 1-3 (average mortality under 2019 Biological Opinion of 61% in Critically Dry years), *with*
 Chisholm Decl., Exh. H (mortality objective of less than 30% in Critically Dry years).

operations that will increase mortality and reduce survival in the Delta, and result in high levels of mortality below Shasta Dam, will not jeopardize the species is arbitrary and capricious.

2. Reliance on Uncertain and Future Mitigation Measures to Support the No Jeopardy Conclusion Is Arbitrary and Capricious

The NMFS Biological Opinion also unlawfully relies on mitigation measures that are not reasonably certain to occur and fails to explain why protected salmon and steelhead will not be jeopardized by adverse impacts from Water Project operations in the short term before future mitigation measures can be implemented. *See Nat'l Wildlife Fed'n*, 524 F.3d at 935–36; *see also S. Yuba River*, 723 F.Supp.2d at 1276–77.

First, the Biological Opinion relies on several protective measures like flow requirements and limits on pumping that are unlikely to be implemented in future droughts, because the agencies have admitted that drought waivers like those issued in 2014-2015 are reasonably foreseeable in future droughts. *See Chisholm Decl., Exh. W.* Protections like reductions in Delta pumping and less negative OMR reverse flows to protect migrating salmon are further not reasonably certain to occur, because the Biological Opinion does not make such reductions mandatory and does not give NMFS authority to require such reductions, instead giving Reclamation discretion to decline to implement these additional protections. NMFS BiOp at 60 (“If 50 percent of a single-year threshold is exceeded [OMR] will be reduced to . . . -3,500 cfs *unless a risk assessment, . . . finds that the risk is no longer present.*” (emphasis added)); *id.* at 542–43. And as in the FWS Biological Opinion, Reclamation may increase pumping beyond the 5,000 cfs OMR limit during an ill-defined “storm event.” NMFS BiOp at 477; *see supra* at 17 & n.11.¹⁶ Similarly, the NMFS Biological Opinion does not require that protective water temperatures below Shasta Dam be maintained, allowing Reclamation to reduce temperature protections for winter-run Chinook salmon. *See* NMFS BiOp at 233 (requiring Reclamation to maintain water temperatures after May 1 “unless the change is caused by events outside

¹⁶ Because the NMFS Biological Opinion fails to consider (let alone model or analyze) the effects of operations during such storm events (e.g., when OMR is permitted to be more negative than -6,000 cfs, when such increased pumping lasts longer than 7 days, and/or when such increased pumping occurs more frequently than once per month), it also fails to consider the effects of the whole action as required under the ESA. 50 C.F.R. §402.02; *Connor v. Buford*, 848 F.2d 1441, 1453 (9th Cir. 1988); *Wild Fish Conservancy v. Salazar*, 628 F.3d 513, 521–25 (9th Cir. 2010).

1 Reclamation’s control or beyond what was planned for in the temperature management plan.”)

2 Finally, as with the FWS Biological Opinion, the habitat restoration on which NMFS relies
3 is not near completion and not reasonably certain in light of the failure to implement those
4 measures from 2009-2019. *See* BA at 4-78; NMFS BiOp at 61, 176.

5 **3. The Incidental Take Statement Is Arbitrary, Capricious, and Contrary to Law**

6 The NMFS Biological Opinion’s incidental take statement is also arbitrary, capricious, and
7 not in accordance with the requirements of the ESA.

8 First, the limit for take of winter-run Chinook salmon caused by water temperature effects
9 below Shasta Dam fails to meet the basic statutory requirements for an incidental take limit. *See*
10 NMFS BiOp at 800–02. This incidental take limit would allow three years of 0% egg to fry
11 survival of winter-run Chinook salmon below Shasta Dam—i.e., *complete mortality of each year’s*
12 *population for three years in a row*—before reinitiation of consultation is required. *See id.* at 801
13 (“The anticipated level of take will be exceeded if there are: Two consecutive years of egg-to-fry
14 survival of less than 15 percent followed by a third year of less than 21 percent . . .”). Because
15 winter-run Chinook salmon generally only live three years, however, this take limit, as written,
16 allows Water Project operations to cause extinction of the species before reinitiation of
17 consultation is required. *See* Chisholm Decl., Exh. R at 87 (“The majority of winter-run return to
18 spawn in 3 years, so a single catastrophe with effects that persist for at least 3 years would affect
19 all of the winter-run cohorts.”). The take limit therefore fails to set an adequate reconsultation
20 trigger as required, and renders the conclusion that the level of incidental take will not jeopardize
21 the species, NMFS BiOp at 813, irrational, arbitrary, and capricious. *See Wild Fish Conservancy*,
22 628 F.3d at 532; *Ctr. for Biological Diversity*, 422 F.Supp.2d at 1131.

23 Second, the NMFS Biological Opinion uses several surrogates that are unlawful because
24 they fail to describe a causal link between the surrogate and take of the listed species, fail to
25 demonstrate that it is impractical to use a numeric limit, and/or fail to set a clear standard for
26 reinitiation of consultation. 50 C.F.R. §402.14(i)(1)(i). First, like FWS’s Delta Smelt entrainment
27 surrogate, NMFS’s incidental take limits for take of spring-run Chinook salmon and Central
28 Valley steelhead from flow management on Clear Creek, and for take of Central Valley steelhead

1 from flow and temperature management in the Stanislaus River, fail to establish a clear standard
 2 for reinitiation of consultation, and potentially allow for take not analyzed in the Biological
 3 Opinion because they contain unbounded exceptions. *See id.*; NMFS BiOp at 805 (setting a take-
 4 limit only for “non-critical years” but failing to establish any limit for critical water years); *id.* at
 5 807 (allowing permissive take level to change if “scheduled by the Stanislaus Watershed Team”); *id.*
 6 (establishing take limit based on in-river temperature, but allowing Reclamation and NMFS to
 7 change that limit if they “agree” another limit “is an acceptable exceedance”).

8 Next, the limit for take of spring-run and winter-run Chinook from flow management in the
 9 upper Sacramento River fails to satisfy the second requirement for the use of surrogates because it
 10 does not explain why it is impractical to use a numeric limit. *See* 50 C.F.R. §402.14(i)(1)(i). The
 11 take statement itself asserts that take of winter-run Chinook by dewatering of redds (areas where
 12 eggs are deposited) is expected to be “one percent of redds,” and similarly, that take of spring-run
 13 Chinook salmon by dewatering of redds is expected to be “up to three percent of redds.” NMFS
 14 BiOp at 803. Yet, inexplicably, the take limit is set based on project operations rather than on
 15 percent of redds dewatered, without any explanation of why stating take in terms of percent of
 16 redds dewatered is impracticable. *See* NMFS BiOp at 803.¹⁷ The Biological Opinion fails to
 17 establish that it would be impracticable “to express the amount or extent of anticipated take or to
 18 monitor take-related impacts in terms of individuals of the listed species,” and this take statement
 19 is thus arbitrary and capricious. 50 C.F.R. §402.14(i)(1)(i); *ONRC*, 476 F.3d at 1037–38.

20 The NMFS Biological Opinion uses two other surrogate take limits without “[d]escrib[ing]
 21 the causal link between the surrogate and take of the listed species” that is required. 50 C.F.R.
 22 §402.14(i)(1)(i); *see also Wild Fish Conservancy*, 628 F.3d at 531–32. First, NMFS uses salvage
 23 of hatchery *late fall*-run salmon as a surrogate for take of *spring*-run salmon by Delta pumping
 24 facilities, without providing any explanation whatsoever of why salvage of those two species are
 25 causally linked. *See* NMFS BiOp at 810. In fact, juvenile spring-run Chinook are typically
 26 migrating through the Delta at different times of year, and at difference sizes, than are late fall-run
 27

28 ¹⁷ In fact, there is already ongoing monitoring of dewatered redds in the upper Sacramento River
 for both spring-run and winter-run Chinook salmon. *See, e.g.,* NMFS BiOp at 210, 262.

1 salmon. *Compare* NMFS BiOp at 382–83 (spring-run reduction in survival through the Delta
 2 driven by overlap with increased exports in April and May) *with id.* at 383–84 (late-fall run
 3 reduction in survival due to earlier emigration period during the fall and early winter).

4 Second, the NMFS Biological Opinion uses temperature-related mortality of winter-run
 5 Chinook salmon as a surrogate for incidental take of spring-run Chinook salmon and Central
 6 Valley steelhead without articulating a rational connection that would support the use of such a
 7 surrogate. *See* NMFS BiOp at 802 (“[T]he anticipated level of take will be exceeded if a condition
 8 for exceedance of take of winter-run Chinook salmon is met.”). Spring-run Chinook salmon
 9 generally spawn in the fall months, while winter-run spawn in the summer. *Compare id.* at 67,
 10 *with id.* at 83. Maintaining adequate water temperatures for winter-run Chinook salmon in the
 11 summer months does not necessarily ensure adequate water temperatures when spring-run
 12 Chinook spawn in the fall; indeed, the Biological Opinion only imposes protective water
 13 temperature requirements in certain years through no later than October 31, i.e., before the end of
 14 the spring-run Chinook spawning period. *Id.* at 242. Steelhead also spawn at a different time of
 15 the year than winter-run Chinook salmon. NMFS BiOp at 102, 805. Thus, there is not the
 16 requisite causal link between the proposed surrogate and impact on the species. Moreover, as
 17 explained above, the incidental take limit for winter-run Chinook is itself unlawful because it
 18 would allow for three years of 100% mortality (which would result in the species going extinct);
 19 thus, using that limit as the surrogate for two other imperiled fish populations is also unlawful.

20 **C. Reclamation’s Reliance on the Flawed Biological Opinions Is Arbitrary,**
 21 **Capricious, and Contrary to the Endangered Species Act**

22 Plaintiffs are also likely to succeed on the merits of their claim that Reclamation acted
 23 arbitrarily and capriciously and violated its independent section 7(a)(2) duty under the ESA, in
 24 relying on the 2019 Biological Opinions. The Ninth Circuit has explained that while section 7
 25 consultation may satisfy an action agency’s procedural obligations under the ESA, an action
 26 agency such as Reclamation “may not rely solely on a . . . biological opinion to establish
 27 conclusively its compliance with its *substantive* obligations under section 7(a)(2).” *Pyramid Lake*
 28 *Paiute Tribe of Indians v. U.S. Dep’t of Navy*, 898 F.2d 1410, 1415 (9th Cir. 1990). In particular,

1 an agency “cannot abrogate its responsibility to ensure that its actions will not jeopardize a listed
2 species”; its reliance on a “biological opinion must not have been arbitrary or capricious.” *Id.*

3 The Ninth Circuit has held that reliance on a biological opinion that has legal flaws is
4 arbitrary and capricious. *Wild Fish Conservancy*, 628 F.3d at 532 (“Where the opinion’s flaws are
5 *legal* in nature, . . . [d]iscerning them requires no technical or scientific expertise, and the failure to
6 do so may result in an action based on reasoning not in accordance with law and . . . thus arbitrary
7 and capricious.” (internal quotation marks omitted; emphasis in original)). For example, in *Wild*
8 *Fish Conservancy*, legal flaws such as failing to articulate a rational connection between a
9 biological opinion’s findings and its no jeopardy conclusion, and issuing an inadequate incidental
10 take statement, made reliance on that opinion by an action agency arbitrary and capricious. *Id.*
11 Here too, the 2019 Biological Opinions are rife with obvious legal errors, including stark
12 disconnects between the facts before the agencies and the agencies’ no jeopardy conclusions, and
13 legally flawed incidental take statements. As in *Wild Fish Conservancy*, these legal flaws render
14 Reclamation’s reliance on the Biological Opinions arbitrary and capricious. *Id.*; *see also Pacific*
15 *Coast Fed. of Fishermen’s Ass’n v. Gutierrez*, 606 F.Supp.2d 1122, 1190–91 (E.D. Cal. 2008)
16 (Reclamation’s reliance on a biological opinion was arbitrary and capricious where the opinion’s
17 “factual findings and analyses with respect to jeopardy and recovery [we]re internally
18 contradictory and incoherent”); *Ctr. for Biological Diversity*, 422 F.Supp.2d at 1142 (reliance on a
19 “legally inadequate” opinion was arbitrary and capricious). Plaintiffs are thus likely to succeed on
20 their claim that Reclamation acted arbitrarily and capriciously, and contrary to law, in relying on
21 the Biological Opinions, and thereby violated its substantive ESA section 7(a)(2) duty to ensure
22 that its Water Project operations do not jeopardize the continued existence of protected species.

23 **III. Immediate Relief Is Needed To Avoid Irreparable Harm**

24 Plaintiffs here are “likely to suffer irreparable harm in the absence of preliminary relief.”
25 *Winter*, 555 U.S. at 20. In ESA cases, a “reasonably certain threat of imminent harm to a
26 protected species is sufficient for issuance of an injunction.” *Marbled Murrelet v. Babbitt*, 83 F.3d
27 1060, 1066 (9th Cir. 1996), *as amended on denial of reh’g* (June 26, 1996). The Ninth Circuit has
28 held that establishing likely harm to members of a protected species constitutes a showing of

irreparable harm “because ‘[o]nce a member of an endangered species has been injured, the task of preserving that species becomes all the more difficult.’” *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 886 F.3d 803, 818 (9th Cir. 2018) (quoting *FCC v. Rosboro Lumber*, 50 F.3d 781, 785 (9th Cir. 1995)); *see also Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545 (1987) (“Environmental injury, by its nature, . . . is often permanent or at least of long duration, *i.e.*, irreparable.”); *Cottonwood*, 789 F.3d at 1091. Thus, for example, “[e]vidence that [listed] salmon will suffer imminent harm of any magnitude is sufficient to warrant injunctive relief.” *Yurok Tribe v. U.S. Bureau of Reclamation*, 231 F.Supp.3d 450, 481–82 (N.D. Cal. 2017).

Here, Plaintiffs easily satisfy the irreparable harm requirement. As an initial matter, the Biological Opinions themselves explicitly contemplate, including in the form of increased take limits, that *more protected species will be harmed or killed* by Water Project operations under Reclamation’s new plan than under the previous operations regime.¹⁸ *See, e.g.*, FWS BiOp at 153, 395–97; NMFS BiOp at 490, 528, 593, 800–10; Rosenfield Decl. ¶¶97, 113, 159, 161, 187–88, 774. This alone is enough to establish a likelihood of irreparable harm warranting a preliminary injunction to maintain the status quo during the potentially year or so it will take to reach a decision on the merits. *See* Chisholm Decl. ¶25; *Nat’l Wildlife Fed’n*, 886 F.3d at 818. Further, although extinction level harm is not required to support an injunction, *Yurok Tribe*, 231 F.Supp.3d at 483, the listed fish species here are already at critically low numbers, making them highly susceptible to extirpation if Reclamation’s new operations are implemented.¹⁹ Rosenfield Decl. ¶¶25–27; *see Nat’l Wildlife Fed’n*, 886 F.3d at 820–21 (finding likelihood of irreparable

¹⁸ The Biological Opinions authorize operations that will result in: (1) increased entrainment and mortality of winter-run Chinook salmon, NMFS BiOp at 489; spring-run Chinook salmon, *id.* at 500; Central Valley Steelhead, *id.* at 509–10; and Delta Smelt, Rosenfield Decl. ¶¶35, 47, 50, 53–54, 105; (2) reduced survival of winter-run and spring-run salmon migrating through the Delta, NMFS BiOp at 382; (3) higher water temperatures below upstream reservoirs, which will harm and kill salmon and steelhead, Rosenfield Decl. ¶¶128–40, 161–64, 177–84, 209–21; (4) reduced abundance and increased risk of extinction for winter-run Chinook salmon caused by large population declines, NMFS BiOp at 696, 706–07; and (5) reduced Delta outflow during the summer and fall months that will significantly harm Delta Smelt, Rosenfield Decl. ¶¶70, 73.

¹⁹ In fact, Dr. Rosenfield concludes that Delta Smelt could go extinct *within a year* under the new operations, Rosenfield Decl. ¶¶25, 31, 45, and that Reclamation’s new operations: are “likely to make extinction of [winter-run Chinook salmon] unavoidable”; put spring-run Chinook salmon in “grave danger of extinction” and “foreclos[e] the best recovery opportunities”; and will “degrade the viability of Central Valley steelhead, severely impair efforts to recover the population . . . and may cause extirpation of the population.” *Id.* ¶¶92–93, 97, 99, 153–55, 201, 205.

harm from water project operations where the species' low abundance made it vulnerable to extinction). The harm to and even loss of these fish populations would be irreparable.²⁰

IV. The Equities Tip Sharply In Favor Of An Injunction

"The plain intent of Congress in enacting [the ESA] was to halt and reverse the trend toward species extinction, whatever the cost." *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978). Because the ESA strikes the balance "in favor of affording endangered species the highest of priorities," *id.* at 194, it "strips courts of at least some of their equitable discretion in determining whether injunctive relief is warranted," *Nat'l Wildlife Fed'n*, 886 F.3d at 817. Specifically, under well-settled Supreme Court precedent "courts do not have discretion to balance the parties' competing interests in ESA cases." *Cottonwood*, 789 F.3d at 1090; *see also Tennessee Valley*, 437 U.S. at 187–88 (Congress determined in the ESA that the value of endangered species is "incalculable"); *Nat'l Wildlife Fed'n*, 422 F.3d at 793–94 (courts may not "weigh economic harm to the public" in conducting the preliminary injunction analysis in ESA cases). Accordingly, when evaluating a request for injunctive relief under the ESA, the balance of hardships and public interest factors always "tip heavily in favor" of the protected species. *Sierra Club v. Marsh*, 816 F.2d 1376, 1383 (9th Cir. 1987). Here, these factors sharply favor preliminary relief.

CONCLUSION

For the foregoing reasons, Plaintiffs respectfully request that the Court grant their motion for preliminary injunction and require Federal Defendants to maintain the status quo by abiding by the terms of biological opinions and the incidental take statements that were in effect immediately prior to the Biological Opinions challenged here, pending a decision on the merits.

Respectfully submitted,

Dated: March 5, 2020

/s/ Barbara J. Chisholm

²⁰ These harms to listed fish species and their habitats in turn irreparably harm Plaintiffs and their members. *See* Decl. of Noah Oppenheim; Decl. of Peter Moyle; *Yurok Tribe*, 231 F.Supp.3d at 481 (fishing associations had established harm to themselves from irreparable harm to salmon by showing that they are "harmed when salmon abundance drops because the potential salmon harvests decrease"); *see also All. for the Wild Rockies v. Cottrell*, 632 F.3d 1127, 1135 (9th Cir. 2011); *Nat'l Wildlife Fed'n.*, 886 F.3d at 822.

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